

Amendments to the Claims

This listing of claims will replace all prior versions, and listings of claims in the application.

Listing of claims:

Claims 1-84 (canceled)

85. (previously presented) A nucleic acid-lipid particle, comprising a lipid layer surrounding and encapsulating a central region containing a polyanionic nucleic acid, wherein said lipid layer comprises (i) an amino lipid comprising an amino group having a pK_a of from 4 to 11, and (ii) a polyethyleneglycol-diacylglycerol (PEG-DAG) conjugate.

86. (previously presented) The nucleic acid-lipid particle in accordance with claim 85, wherein said amino lipid is selected from the group consisting of: (1,2-dioleoyloxy-3-dimethylamino-propane (DODAP), N,N-dimethyl-2,3-dioleoyloxy)propylamine (DODMA), and a mixture thereof.

87. (previously presented) The nucleic acid-lipid particle in accordance with claim 85, neutral lipid selected from the group consisting of dioleoylphosphatidylethanolamine (DOPE), palmitoyloleoylphosphatidylcholine (POPC), distearoylphosphatidylcholine (DSPC), sphingomyelin and a mixture thereof.

88. (previously presented) The nucleic acid-lipid particle in accordance with claim 85, further comprising cholesterol.

89. (previously presented) The nucleic acid-lipid particle in accordance with claim 88, wherein said cholesterol constitutes from 35% to 55% of the total lipid present in said particle.

90. (previously presented) The nucleic acid-lipid particle in accordance with claim 85, wherein said amino lipid constitutes from 10% to 40% of the total lipid present in said particle.

91. (previously presented) The nucleic acid-lipid particle in accordance with claim 85, wherein said amino lipid constitutes from 10% to 35% of the total lipid present in said particle.

92. (cancelled)

93. (previously presented) The nucleic acid-lipid particle in accordance with claim 85, wherein said PEG-DAG conjugate constitutes from 0.5% to 15% of the total lipid present in said particle.

94. (previously presented) The nucleic acid-lipid particle in accordance with claim 85, further comprising a neutral lipid, wherein said neutral lipid is distearoylphosphatidylcholine (DSPC).

95. (previously presented) The nucleic acid-lipid particle in accordance with claim 85, wherein said amino lipid is N,N-dimethyl-2,3-dioleoyloxy)propylamine (DODMA), and wherein said nucleic acid-lipid particle further comprises distearoylphosphatidylcholine (DSPC) and a sterol.

96. (previously presented) The nucleic acid-lipid particle in accordance with claim 95, wherein said sterol is cholesterol.

97. (previously presented) The nucleic acid-lipid particle in accordance with claim 85, wherein said polyanionic nucleic acid is DNA.
98. (previously presented) The nucleic acid-lipid particle in accordance with claim 85, wherein said polyanionic nucleic acid is a plasmid.
99. (previously presented) The nucleic acid-lipid particle in accordance with claim 85, wherein said polyanionic nucleic acid is an antisense oligonucleotide.
100. (previously presented) The nucleic acid-lipid particle in accordance with claim 85, wherein said polyanionic nucleic acid is a ribozyme.
101. (previously presented) The nucleic acid-lipid particle in accordance with claim 85, wherein said polyanionic nucleic acid encodes a therapeutic product of interest.
102. (previously presented) The nucleic acid-lipid particle in accordance with claim 101, wherein said therapeutic product of interest is a peptide or protein.
103. (cancelled)
104. (previously presented) The nucleic acid-lipid particle in accordance with claim 85, wherein the nucleic acid in said nucleic acid-lipid particle is not substantially degraded after incubation of said particle in serum at 37°C for 30 minutes.
105. (previously presented) The nucleic acid-lipid particle in accordance with claim 85, wherein said polyanionic nucleic acid is fully encapsulated in said nucleic acid-lipid particle.
106. (previously presented) A pharmaceutical composition comprising a nucleic acid-lipid particle in accordance with claim 85 and a pharmaceutically acceptable carrier.
107. (previously presented) A pharmaceutical composition in accordance with claim 106, wherein said amino lipid is N,N-dimethyl-2,3-dioleoyloxy)propylamine (DODMA) and wherein said nucleic acid-lipid particle further comprises distearoylphosphatidylcholine (DSPC) and a sterol.
108. (previously presented) A method of introducing a nucleic acid into a cell, said method comprising contacting said cell with a nucleic acid-lipid particle according to claim 85.
109. (previously presented) The nucleic acid-lipid particle in accordance with claim 85, further comprising a sterol.
110. (previously presented) The pharmaceutical composition in accordance with claim 107, wherein said sterol is cholesterol.